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FREIGHTER WASTE CONTAINING CASTOR BEANS
CAUSES DEATH OF GEESE ON MARYLAND BEACH

An over-dose of castor beans — the source of castor oil — was responsible for the recent deaths of a considerable number of Canada geese found in Kent County Maryland, reports the Fish and Wildlife Service.

The presence of the dead and dying geese along the beach at the mouth of Lloyds Creek, adjacent to the Sassafras River, near Betterton, Md., was reported to the Service on January 26 by Ernest Vaughan, Director of the Maryland Game and Inland Fish Commission.

Government biologists stationed at the Service's Patuxent Research Refuge near Bowie, Md., conducted post mortem examinations on seven of the dead birds which were brought to the Refuge on January 27 by Maryland State Game Warden James W. Ivens, Jr. The most prominent lesions exhibited at post mortem were hemorrhages in the heart muscle, mesenteric fat and intestine. Blood filled the lower intestine of all but one bird. All of the birds were in good flesh and none showed signs of disease or parasites.

When tests of the tissues failed to show the presence of an infectious agent, a study of the blood was made by Dr. Ernest A. Wehr, of the Bureau of Animal Industry. This indicated that no blood parasites were present.

After exhausting these avenues of research, F. M. Uhler, of the Patuxent research staff, made a microscopic study of the contents of the gizzards from four birds. This examination revealed the presence of small quantities of the seed-coats of castor beans (Ricinus communis) in all of them. The toxic alkaloid in the castor beans, according to Service experts, produces an agglutination of blood cells and hemorrhages result from the blood clots that are formed. All available evidence pointed to castor beans as being the cause of the death of these birds.

After ascertaining the cause of death, Service officials sought the source of the castor beans. On February 8, from Game Warden Ivens, they learned that sacks containing what appeared to be waste material made up of coffee berries, cocoa beans, and castor beans — apparently sweepings discarded from a freighter — had floated in on the beach and burst open in the area where the dead geese were found.

About 100 geese died before the mortality ceased after the State of Maryland took immediate steps to dispose of the waste material. Service biologists state that this is their first record of goose mortality from such an unusual cause.

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